

**STATEMENT OF BASIS (AI No. 2534)**

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0104825 to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Baton Rouge Machine Works, Inc.  
12612 Ronaldson Road  
Baton Rouge, LA 70807

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Lisa Kemp

**DATE PREPARED:** January 23, 2009

**1. PERMIT STATUS****A. Reason For Permit Action:**

Permit revocation and reissuance of a current Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term. Baton Rouge Machine Works is requesting the revocation and reissuance of LPDES permit number LA0104825 for the purpose of adding new wastestreams to Outfalls 001 and 002.

Baton Rouge Machine Works is currently authorized to discharge via three final outfalls into an unnamed ditch then to Cypress Bayou in accordance with LPDES permit number LA0104825. Outfalls 001 and 003 are for the discharge of treated sanitary wastewater. Outfall 002 is for the discharge of equipment washwater. Industrial stormwater runoff is covered by the Stormwater Pollution Prevention Plan requirements contained in the Narrative Requirements of the permit.

Outfall 001 is currently for discharge of treated sanitary wastewater from the Main Building, which houses the Main Offices and Machine Shop. Baton Rouge Machine Works proposes to commingle treated sanitary wastewater from the sewage treatment plant located at the Welding Shop with treated sanitary wastewater from the sewage treatment plant located at the Main Building for discharge through Outfall 001.

Outfall 002 is currently for the discharge of equipment washwater. A new treatment system has been installed for the washrack cleaning area. The new treatment system is flushed for two hours per day. The estimated volume of treated washrack effluent is 100 gallons per day (gpd). A Water Cutting Machine (WCM) has been installed inside the Welding Shop. The WCM will use high pressure water, and garnet to cut through industrial steel pipe. Baton Rouge Machine Works proposes to route the treated wastewater from the WCM via a new PVC line to the existing stormwater system. The Water Cutting Machine wastewater will commingle with treated effluent from the washrack and stormwater runoff for discharge through Outfall 002.

**B. LPDES permit –** LPDES permit effective date: May 1, 2005  
LPDES permit expiration date: April 30, 2011  
EPA has not retained enforcement authority.

Statement of Basis for  
 Baton Rouge Machine Works, Inc.,  
 LA0104825, AI No. 2534  
 Page 2

C. Date Application Received: October 10, 2008; additional information was received on December 17, 2008.

## 2. FACILITY INFORMATION

### A. FACILITY TYPE/ACTIVITY – equipment repair facility

This is an existing equipment repair facility. The facility repairs pumps and rolls from the paper, power generation, and chemical industries. They also do some manufacturing of shafts and bearing houses. The facility includes a washrack for cleaning parts and tools. Equipment to be repaired is cleaned at the facility from which it originates before being brought on site. A new Water Cutting Machine (WCM), installed inside the Welding Shop, will use high pressure water, and garnet to cut through industrial steel pipe. As the cutting is performed on the pipe, spent garnet, metal fines, and water will be filtered and treated. The solids will be filtered out and routed to a container for disposal in a state approved landfill. There are no chemicals used in this process.

### B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I – BPJ, This is primarily a repair facility.
3. Wastewater Type: II
4. SIC code: 7699, 3599

C. LOCATION - 12612 Ronaldson Road, in Baton Rouge, East Baton Rouge Parish  
 Latitude 30° 33' 39", Longitude 91° 10' 33"

## 3. OUTFALL INFORMATION

### Outfall 001

Discharge Type: treated sanitary wastewater from the Main Building (Main Offices and Machine Shop) and at the Welding Shop  
 Treatment: 2 mechanical treatment units with chlorination  
 Location: at the point of discharge from the pipe located in front of the Main Building, prior to combining with other waters  
 (Latitude 30° 33' 41", Longitude 91° 10' 32")  
 Flow: 1050 gpd (Main Building – 1000 gpd, Welding Shop – 50 gpd)  
 Discharge Route: unnamed ditch to Cypress Bayou

### Outfall 002

Discharge Type: equipment washwater, high pressure water cutting machine wastewater, and stormwater runoff  
 Treatment: sedimentation and filtration  
 Location: at the point of discharge from the treatment system, prior to combining with other waters  
 (Latitude 30° 33' 41", Longitude 91° 10' 32")  
 Flow: 450 gpd (100 gpd - equipment washwater, 350 gpd – water cutting machine wastewater)  
 Discharge Route: unnamed ditch to Cypress Bayou

Statement of Basis for  
Baton Rouge Machine Works, Inc.,  
LA0104825, AI No. 2534  
Page 3

#### Outfall 003

Discharge Type: treated sanitary wastewater from the Roll Shop  
Treatment: mechanical treatment system with chlorination  
Location: at the point of discharge from the sewage treatment facility, prior to  
combining with other waters  
(Latitude 30° 33' 43", Longitude 91° 10' 32")  
Flow: 1000 gpd  
Discharge Route: unnamed ditch to Cypress Bayou

#### **4. RECEIVING WATERS**

STREAM - unnamed ditch to Cypress Bayou

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040103

DESIGNATED USES - a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife

#### **5. TMDL STATUS**

Subsegment 040103, Comite River - from White Bayou to Amite River, is listed on LDEQ's Final 2006 303(d) List as impaired for pathogen indicators. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the equipment repair facility point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

Outfalls 001 and 003 for the discharge of treated sanitary wastewater have the potential to discharge pollutants that may contribute to the fecal coliform impairment of the receiving stream. Discharges in compliance with the standard sanitary fecal coliform limits applied in this permit at Outfalls 001 and 003 should not cause or further contribute to the pathogen indicators impairments.

#### **6. PROPOSED EFFLUENT LIMITS**

BASIS - See Rationale, Page 7.

Changes from the previous permit:

##### Outfall 001

1. The outfall description has been modified to include the discharge of treated sanitary wastewater from the Welding Shop. The current effluent limitations and monitoring requirements are adequate for this discharge.

Statement of Basis for  
 Baton Rouge Machine Works, Inc.,  
 LA0104825, AI No. 2534  
 Page 4

Outfalls 001 and 003

1. Monthly average BOD<sub>5</sub>, TSS, and Fecal Coliform limits have been added and the maximum Fecal Coliform limitation has changed from Weekly Average to Daily Maximum in accordance with current guidance for similar discharges.

Outfall 002

1. The outfall description has been modified to include the discharge of high pressure water cutting machine wastewater and stormwater runoff.
2. The COD Monthly Average limitation has been deleted and the Daily Maximum limitation has been changed to 125 mg/L. In accordance with LAG480000, Schedule B – Exterior Vehicle and Equipment Washing, if process wastewater is combined with stormwater, the COD limitation shall be 125 mg/L daily maximum ( no monthly average is set).
3. The outfall location has been changed from “at the point of discharge from the oil/water separator” to “at the point of discharge from the treatment system.”

**7. COMPLIANCE HISTORY/COMMENTS**

- A. OEC – There are no open, appealed, or pending OEC enforcement actions as of December 16, 2008. A Notice of Deficiency was issued to the facility on October 24, 2007 as a result of an inspection of the facility on September 6, 2007 – see Inspection, below. The facility was cited for DMR excursions. In a response letter dated November 20, 2007, Baton Rouge Machine Works, Inc. stated:

- 1.All sumps and tanks were vacuumed.
- 2.Motor was replaced on faulty pump.
- 3.Number of inspections at all outfalls has been increased.
- 4.Absorbents are being placed in all sumps.
- 5.Chlorine tablets are inspected and used more frequently.
- 6.All lines were flushed.

A Deficiency Clear letter was issued on November 29, 2007.

- B. DMR Review/Excursions – DMRs on file were reviewed for the period January, 2007 to December, 2008. Monthly Averages were not reported for COD at Outfall 002. The following excursions were noted:

Date	Parameter	Outfall	Reported Value	Permit Limits
Sept., 2008	TSS	001	166 mg/L	45 mg/L
	TSS	003	422.5 mg/L	45 mg/L
July, 2008	TSS	003	181 mg/L	45 mg/L
Dec., 2007	BOD <sub>5</sub>	001	60.6 mg/L	45 mg/L
Oct., 2007	TSS	003	183 mg/L	45 mg/L
June, 2007	Fecal Coliform	001	>200,000 col/ml	400 col/ml
	TSS	002	53 mg/L	45 mg/L
	BOD <sub>5</sub>	003	164 mg/L	45 mg/L
	TSS	003	84 mg/L	45 mg/L
	Fecal Coliform	003	>200,000 col/ml	400 col/ml
Apr., 2007	BOD <sub>5</sub>	001	49.5 mg/L	45 mg/L

Statement of Basis for  
Baton Rouge Machine Works, Inc.,  
LA0104825, AI No. 2534  
Page 5

Date	Parameter	Outfall	Reported Value	Permit Limits
Apr., 2007	TSS	001	83.5 Mg/L	45 mg/L
	COD	002	1020 mg/L	300 mg/L
	Oil & Grease	002	205 mg/L	15 mg/L
	BOD5	003	70.5 mg/L	45 mg/L
	TSS	003	388 mg/L	45 mg/L
	Fecal Coliform	003	128,000 col/ml	400 col/ml

C. Inspection – An inspection performed on September 6, 2007 revealed the following:

1. DMR review for January 2006 to April 2007 revealed 2 fecal, 7 TSS, and 6 BOD excursions.
2. The facility grounds were being well maintained.
3. The receiving water appeared septic. There was a light grey color. There was no smell, no oily sheen and no solids were present.
4. A TSS and a BOD sample were taken. TSS sample results – 72.0 ppm (TSS limits = 45 mg/L) BOD sample results – 22 ppm (BOD limits = 45 mg/L)

## 8. EXISTING EFFLUENT LIMITS

Outfalls 001 and 003 – treated sanitary wastewater

Pollutant	Limitation		Frequency
	Monthly Avg.	Weekly Avg.	
	mg/L		
Flow	---	Report	quarterly
BOD <sub>5</sub>	---	45	quarterly
TSS	---	45	quarterly
Fecal Coliform colonies/100ml	---	400	quarterly
pH, s.u.	6.0 (min)	9.0 (max)	quarterly

Outfall 002 – equipment washwater

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	mg/L		
Flow	Report	Report	quarterly
COD	200	300	quarterly
TSS	---	45	quarterly
Oil & Grease	---	15	quarterly
Soaps & Detergents	Inventory Record	---	quarterly
Oil & Grease, Visual	---	No Presence	1/day
pH, s.u.	6.0 (min)	9.0 (max)	quarterly

Statement of Basis for  
Baton Rouge Machine Works, Inc.,  
LA0104825, AI No. 2534  
Page 6

## **9. ENDANGERED SPECIES**

The receiving waterbody, Subsegment 040103 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf sturgeon. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

## **10. HISTORIC SITES**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## **11. TENTATIVE DETERMINATION**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

## **12. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis for  
 Baton Rouge Machine Works, Inc.,  
 LA0104825, AI No. 2534  
 Page 7

### Rationale for Baton Rouge Machine Works, Inc.

1. **Outfall 001** - treated sanitary wastewater from the Main Building and the Welding Shop (estimated flow is 1050 gpd)  
**Outfall 003** – treated sanitary wastewater from the Roll Shop (estimated flow is 1000gpd)

Pollutant	Limitation		Reference
	Monthly Avg	Weekly Avg	
	mg/L		
Flow	---	Report	
BOD <sub>5</sub>	30	45	Previous permit, similar discharges* (BPJ), LAG530000
TSS	30	45	Previous permit, similar discharges* (BPJ), LAG530000
Fecal Coliform colonies/100ml	200	400 (Daily Max)	Previous permit, similar discharges* (BPJ), LAG530000
pH, s.u.	6.0 (min)	9.0 (max)	Previous permit, similar discharges* (BPJ), LAG530000

**Treatment:** mechanical treatment units with chlorination

**Monitoring Frequency:** Once per quarter for all parameters at the point of discharge from the STP prior to mixing with other waters.

**Limits Justification:** Limits and monitoring frequencies are based on the previous permit, current guidance for similar discharges from other industrial facilities and the Class I Sanitary Discharge General Permit, LAG530000 effective November 1, 2007.

\* Existing permits for similar outfalls

Statement of Basis for  
 Baton Rouge Machine Works, Inc.,  
 LA0104825, AI No. 2534  
 Page 8

2. **Outfall 002** - equipment washwater, high pressure water cutting machine wastewater, and stormwater runoff (estimated flow is 450 gpd; 100 gpd - equipment washwater, 350 gpd - water cutting machine wastewater)

Pollutant	Limitation		Reference
	Monthly Avg.	Daily Max.	
	mg/L		
Flow	Report	Report	
COD		125	Previous permit, similar discharges*, LAG480000 (BPJ)
TSS	---	45	Previous permit, similar discharges*, LAG480000 (BPJ)
Oil & Grease	---	15	Previous permit, similar discharges*, LAG480000 (BPJ)
Soaps & Detergents	Inventory Record	---	Previous permit, similar discharges*, LAG480000 (BPJ)
Oil & Grease, Visual	---	No Presence	Previous permit, similar discharges*, LAG480000 (BPJ)
pH, s.u.	6.0 (min)	9.0 (max)	Previous permit, similar discharges*, LAG480000 (BPJ)

**Treatment:** sedimentation and filtration

**Monitoring Frequency:** daily for visible sheen and quarterly for flow, TSS, COD, oil and grease, and pH at the point of discharge from the treatment system prior to mixing with other waters. Soaps and Detergents: document in a quarterly inventory record the quantity and type of any Soap and/or Detergent used during each calendar month.

**Limits Justification:** Limits and monitoring frequencies are based on the previous permit, current guidance for similar discharges from other facilities and the Light Commercial General Permit, LAG480000 effective August 1, 2001. Water cutting machine wastewater is a component of this discharge. Since no chemicals are used in the system and the cutting water is used to cut metal, this wastewater should be similar to equipment washwater. The COD Monthly Average limitation has been deleted and the Daily Maximum limitation has been changed to 125 mg/L. In accordance with LAG480000, Schedule B – Exterior Vehicle and Equipment Washing, if process wastewater is combined with stormwater, the COD limitation shall be 125 mg/L daily maximum (no monthly average is set).

Note: EPA Guidelines for Metal Products & Machinery (40 CFR Part 438) are applicable; however, more stringent state requirements for exterior equipment washwater are being placed in the permit.

\* Existing permits for similar outfalls

BPJ Best Professional Judgement  
 su Standard Units



Statement of Basis for  
Baton Rouge Machine Works, Inc.,  
LA0104825, AI No. 2534  
Page 9

**NOTE**

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

**STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 3599 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).